

Safety data sheet POTASSIUM METABISULFITE



Issue 19/03/03
Revision n. 1 del settembre 2009
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This data sheet cancels and replaces any previous edition

Safety data sheet according to Regulation (EC) Nr.1907/2006 dated 18 December 2006 as carried out by the Law 6 April 2007, n.46

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

Trade name: Potassium Metabisulfite
Substance name: Potassium Metabisulfite
Molecular formula: $K_2S_2O_5$
Chemical name: Dipotassium disulphite
N. CAS.: 16731-55-8
N. CE.: 240-795-3
Num. REACH: 01-2119537422-45-XXXX

1.2. Relevant identified uses of the substance of mixture and uses advised against

Use of the Substance/mixture: Preervative, antioxidant for oenological and professional use

1.3. Details of the supplier of the safety data sheet

DISTRIBUTOR NAME:: ENOLOGICA VASON SpA - Loc. Nassar 37
37029 SAN PIETRO IN CARIANO (VR) ITALY
tel.045-6859017 – fax. 045-7725188
www.vason.com

e-mail: info@vason.com

Emergency telephone number: Telephone 045-6859017

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to REGULATION(EC) N. 1272/2008 CLP

Serious eye damage/irritation, Cat. 1

Specific target organ toxicity following single exposure: Cat. 3 (irritating to respiratory system)

According to directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Risk of serious damage to eyes.

Irritating to respiratory system

Contact with acids liberates toxic gas

According to REGULATION(EC) N. 1272/2008 CLP

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Pictogram:

Signal word:

Danger

Hazard statement :

H318 Causes serious eye damage
H335 May cause respiratory irritation

Precautionary Statements:

Prevention:

P280 Wear protective gloves/protective clothing/ eye Protection/face protection
P271 Use only outdoors or in a well-ventilated area
P260i Do not breathe dust/gas/mist/vapours

Response:

P305 + P351 + P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell

P310 Immediately call a POISON CENTER or doctor

P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P405 Store locked up

Disposal:

P501 Dispose of contents/container to hazardous or special Waste collection point

Labelling of special preparations (GHS)

Contact with acids liberates toxic gas

According to Directive 67/548/EEC or 1999/45/EC

as in Annex VI of Directive 67/548/EEC

Hazard symbol(s)	Xi	Irritant.
R-phrase(s)	R37	Irritating to respiratory system.
	R41	Risk of serious damage to eyes
	R31	Contact with acids liberates toxic gas
S-phrase(s)	S39	Wear eye/face protection.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

2.3 Other hazards

According to Regulation (EC) No. 1272/2008 CLP

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Other Hazards (GHS):

No specific dangers known, if the regulations/notes for storage and handling are considered. If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. COMPOSITION – INFORMATION ON INGREDIENTS

3.1 Substances

CAS n.	EC- Number	Components	%
16731-55-8	240-795-3	Dipotassium disulphite	≥ 97,2

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Remove contaminated clothing.

If inhaled: If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention. After inhalation of decomposition products: Immediately inhale corticosteroid dose aerosol.

On skin contact: Wash thoroughly with soap and water.

On contact with eyes: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion: Rinse mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: allergic symptoms

Hazards: Risk of sulfur dioxide formation by reaction with gastric acid after swallowing.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: foam.

5.2 Special hazards arising from the substance or mixture

Sulphur dioxide

The substances/groups of substances mentioned can be released if the product is involved in a fire.

5.3 Advice for fire-fighters

Special protective equipment: Wear a self-contained breathing apparatus.

Further information: Contaminated extinguishing water must be disposed of in accordance with official regulations. In case of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Ensure adequate ventilation. Avoid dust formation. Avoid contact with eyes.

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6.2 Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Sweep/shovel up. Correctly dispose of recovered product immediately.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Use only in well-ventilated areas. Avoid dust formation.

7.2 Protection against fire and explosion:

The substance/product is non-combustible. No special precautions necessary.

7.3 Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances. Segregate from oxidants.

Do not store with: sodium nitrate, sodium nitrite, sodium sulfide

Further information on storage conditions: Keep in a cool place. Keep container dry. Keep container in a well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Components with workplace control parameters

7446-09-5: Sulphur dioxide

PNEC

freshwater: 1.17 mg/l

marine water: 0.12 mg/l

STP: 88.1 mg/l

DNEL

Inhalation

The nuisance dust limit (inhalativ fraction) was used as basis for the DNEL.

8.2 Exposure controls:

Personal protective equipment

Respiratory protection:

Breathing protection if dusts are formed. Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

Breathing protection if breathable aerosols/dust are formed. Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

Chemical resistant protective gloves (EN 374)

Hand protection:

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Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Do not inhale vapours or dust. Hands and/or face should be washed before breaks and at the end of the shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Form:	powder
Colour:	white
Odour:	faint odour, of sulfur dioxide
pH value:	3,8 - 4,6 (5 %(m))
decomposition point:	150 °C
Density:	2,34 g/cm ³
Relative density:	2,3 (20 °C)
Solubility in water:	hydrolyzes approx. 450 g/l (20 °C)
Partitioning coefficient n-octanol/water (log Kow):	not applicable
Thermal decomposition:	> 150 °C To avoid thermal decomposition, do not overheat.
Viscosity, dynamic:	not applicable

9.2. Other information:

Bulk density:	1.100 - 1.300 kg/m ³
pKA:	not applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions if stored and handled as prescribed/indicated.

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10.2 Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

10.3 Possibility of hazardous reactions:

Reacts with nitrites. Reacts with nitrates. Reacts with oxidizing agents.

10.4 Conditions to avoid:

Avoid humidity.

10.5 Incompatible materials:

Substances to avoid: acids, oxidizing agents, nitrites, nitrates, sulfides

10.6 Hazardous decomposition products:

Hazardous decomposition products: Sulphur dioxide

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Experimental/calculated data:

LD50 rat (oral): approx. 2.300 mg/kg (BASF-Test)

LC50 rat (by inhalation): > 5,5 mg/l 4 h (OECD Guideline 403)

The product has not been tested. The statement has been derived from products of a similar structure or composition. Tested as dust aerosol.

LD50 rat (dermal): > 2.000 mg/kg (OECD Guideline 402)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Irritation

Assessment of irritating effects:

Risk of serious damage to eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (BASF-Test)

Serious eye damage/irritation rabbit: irreversible damage (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from products of a similar structure or composition. A sensitizing effect on particularly sensitive individuals cannot be excluded.

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Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing. (OECD Guideline 429)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in the drinking water in high doses, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Aspiration hazard

not applicable

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms.

The product may hydrolyse. The test result maybe partially due to degradation products.

Toxicity to fish:

LC50 (96 h) 460 - 1000 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

Nominal concentration.

Aquatic invertebrates:

EC50 (48 h) 89 mg/l, Daphnia magna (Directive 79/831/EEC, static)

Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

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Aquatic plants:

EC50 (72 h) 43,8 mg/l (growth rate), *Scenedesmus subspicatus* (Algal growth inhibition test, static) Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Microorganisms/Effect on activated sludge:

No observed effect concentration (180 min) \geq 1.000 mg/l, (OECD Guideline 209, aquatic) Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic toxicity to fish:

No observed effect concentration (34 d) \geq 316 mg/l, *Brachydanio rerio* (OECD Guideline 210, Flow through.)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), $>$ 10 mg/l, *Daphnia magna* (OECD Guideline 211, semistatic)

Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Assessment of terrestrial toxicity:

Study does not need to be conducted.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Inorganic product which cannot be eliminated from water by biological purification processes.

Assessment of stability in water:

Study scientifically not justified.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

12.4. Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

12.5 Results of PBT and vPvB assessment

Not applicable for inorganic substances.

12.6 Additional information

Sum parameter

Chemical oxygen demand (COD): (calculated) approx. 140 mg/g

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Other ecotoxicological advice:

Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Contact manufacturer regarding recycling.

Contact waste centre regarding recycling.

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. TRANSPORT INFORMATION

Land transport

ADR Not classified as a dangerous good under transport regulations

RID Not classified as a dangerous good under transport regulations

Inland waterway transport

AND Not classified as a dangerous good under transport regulations

Sea transport

IMDG Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO Not classified as a dangerous good under transport regulations

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Chemical Safety Assessment

Chemical Safety Assessment performed

16. OTHER INFORMATION

Any other intended applications should be discussed with the manufacturer.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of

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the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Enologica Vason arranges training meetings focused on knowledge and use of its products.
The data contained are based on the current level of our knowledge at the date of issue and/or revision.
They are referred only to the product indicated and do not represent a specification of quality guarantee.
